

## REMARKS

The Office Action dated May 26, 2010, and made final, has been carefully reviewed and the foregoing amendment and following remarks have been made in consequence thereof.

Claims 15, 17-26, 44-53, 68, and 70-74 are now pending in this application. Claims 15, 17-26, 44-53, 68, and 70-74 stand rejected.

The rejection of Claims 15, 17-22, 25, 44, 68, and 73 under 35 U.S.C. § 112, second paragraph is respectfully traversed. Claims 15, 20, 22, 25, 44, 68, and 73 are amended herein to address the issues raised in the Office Action. Applicants respectfully submit that Claims 15, 20, 22, 25, 44, 68, and 73 satisfy Section 112, second paragraph. Claims 17-21 depend from independent Claim 15. When the recitations of Claims 17-21 are considered in combination with the recitations of Claim 15, Applicants respectfully submit that dependent Claims 17-21 likewise satisfy Section 112, second paragraph. For at least the reasons set forth above, Applicants respectfully request that the rejection of Claims 15-22, 25, 44, 68, and 73 under Section 112, second paragraph be withdrawn.

The rejection of Claims 15, 17-26, and 44-53 under 35 U.S.C. § 101 is respectfully traversed. Claims 15, 22, and 44 are amended herein to address the issues raised in the Office Action. Applicants respectfully submit that Claims 15, 22, and 44 satisfy Section 101. Claims 17-21, 23-26, and 45-53 depend from independent Claims 15, 22, and 44, respectively. When the recitations of Claims 17-21, 23-26, and 45-53 are considered in combination with the recitations of Claim 15, 22, and 44, Applicants respectfully submit that dependent Claims 17-21, 23-26, and 45-53 likewise satisfy Section 101. For at least the reasons set forth above, Applicants respectfully request that the rejection of Claims 15, 17-21, 22-26, and 44-53 under Section 101 be withdrawn.

The rejection of Claims 15, 17-26, 44-53, 68, and 70-74 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication Pub. No. 2003/0088433 (Young) in view of U.S. Patent No. 5,794,050 (Dahlgren) and U.S. Patent Application Publication Pub. No. 2003/0149657 (Reynolds) is respectfully traversed.

Applicants respectfully submit that no combination of the cited references describes or suggests the claimed invention. At least one of the differences between the cited references and the present invention is that no combination of Young, Dahlgren, and Reynolds describes or suggests *determining temporal relationships between events*, and generating a structure events record *from the temporal relationships*. (Emphasis added.) Moreover, no combination of Young, Dahlgren, and Reynolds describes or suggests comparing the structured events record to a plurality of templates of pattern events including *comparing temporal relationships to temporal constraints*. (Emphasis added.) In contrast to the present invention, Young describes merely identifying a plurality of business events and generating a record of the events. No combination of Dahlgren and Reynolds overcomes the deficiencies of Young. Rather, Dahlgren is cited to describe parsing articles into component parts of speech and grammar structure, and Reynolds is cited to describe computing a risk measure.

Young describes a method for propagating a business event. A predictive application identifies one or more business events, and a record of the event is generated. Young describes three paradigms that manage the events. A reactive paradigm deals with the events as exceptions and upon occurrence. A proactive paradigm determines a course of action that may include a generation of events or an enforcement of previously defined policies. A predictive paradigm generates of events or predictions regarding possible events that may arise. Notably, Young does not describe or suggest determining temporal relationships between events and generating a structure events record from the temporal relationships. Moreover, Young does not describe or suggest comparing the structured events record to a plurality of templates of pattern events including comparing temporal relationships to temporal constraints.

Dahlgren describes a system for interpreting natural language. A parser 502 analyzes grammatical parts of a natural language sentence, and a disambiguation module 504 eliminates structural and word sense ambiguity. A naïve semantic lexicon 512 determines the semantic and pragmatic plausibility of each parsing structure, and a formal semantics module 506 translates natural language input into a logical form. Notably, Dahlgren does not describe or suggest determining temporal relationships between events and generating a structure events record from the temporal relationships. Moreover, Dahlgren does not describe or suggest comparing the

structured events record to a plurality of templates of pattern events including comparing temporal relationships to temporal constraints.

Reynolds describes a system for measuring and managing operational risk. System 10 includes a calibration engine 50 that uses input data and reporting hierarchy information to determine an appropriate set of loss processes. A scenario generator module 70 generates a plurality of scenarios, and a simulation engine 80 uses scenario sets having loss processes with attributes or risk factors to generate scenarios of loss events. A risk engine 90 determines loss distributions and risk measures associated with each loss process. Notably, Reynolds does not describe or suggest determining temporal relationships between events and generating a structure events record from the temporal relationships. Moreover, Reynolds does not describe or suggest comparing the structured events record to a plurality of templates of pattern events including comparing temporal relationships to temporal constraints.

Claim 15 recites a computer-implemented method for determining business risk including “retrieving, using the computer, a plurality of articles . . . extracting event details and relationships between events and the target business entity from the component parts of speech and grammar structure . . . determining, using the computer, temporal relationships between the events based at least in part on the extracted event details and relationships . . . generating a structured events record from the extracted event details and relationships and from the temporal relationships, the structured events record stored within the database . . . retrieving a plurality of templates of pattern events, wherein each template comprises a number and type of preselected events that form a pattern in an event category and temporal constraints that exist between the preselected events . . . comparing the structured events record to the plurality of templates of pattern events including comparing the temporal relationships to the temporal constraints . . .”

Applicants respectfully submit that no combination of Young, Dahlgren, and Reynolds describes or suggests a computer-implemented method for determining business risk as is recited in Claim 15. Specifically, no combination of Young, Dahlgren, and Reynolds describes or suggests *determining temporal relationships between events* and generating a structure events record *from the temporal relationships*. (Emphasis added.) Moreover, no combination of Young, Dahlgren, and Reynolds describes or suggests comparing the structured events record to a plurality of templates of pattern events including *comparing temporal relationships to temporal*

*constraints.* (Emphasis added.) In contrast to the present invention, Young describes merely identifying a plurality of business events and generating a record of the events. No combination of Dahlgren and Reynolds overcomes the deficiencies of Young. Rather, Dahlgren is cited to describe parsing articles into component parts of speech and grammar structure, and Reynolds is cited to describe computing a risk measure.

Accordingly, for at least the reasons set forth above, Claim 15 is submitted as patentable over Young in view of Dahlgren and Reynolds.

Claims 17-21 depend from independent Claim 15. When the recitations of Claims 17-21 are considered in combination with the recitations of Claim 15, Applicants respectfully submit that dependent Claims 17-21 likewise are patentable over Young in view of Dahlgren and Reynolds.

Claim 22 recites a computer-implemented method for monitoring business risk including "retrieving, using the computer, a plurality of articles . . . extracting event details and relationships between events and the target business entity from the component parts of speech and grammar structure . . . determining, using the computer, temporal relationships between the events based at least in part on the extracted event details and relationships . . . generating a structured events record from the extracted event details and relationships and from the temporal relationships, the structured events record stored within the database . . . retrieving a plurality of templates of pattern events, wherein each template comprises a number and type of preselected events that form a pattern in an event category and temporal constraints that exist between the preselected events . . . comparing the structured events record to the plurality of templates of pattern events including comparing the temporal relationships to the temporal constraints . . ."

Applicants respectfully submit that no combination of Young, Dahlgren, and Reynolds describes or suggests a computer-implemented method for monitoring business risk as is recited in Claim 22. Claim 22 recites a computer-implemented method including steps essentially similar to those recited in Claim 15. Thus, Applicants respectfully submit that Claim 22 is patentable for the reasons that correspond to those given with respect to Claim 15.

Accordingly, for at least the reasons set forth above, Claim 22 is submitted as patentable over Young in view of Dahlgren and Reynolds.

Claims 23-26 depend from independent Claim 22. When the recitations of Claims 23-26 are considered in combination with the recitations of Claim 22, Applicants respectfully submit that dependent Claims 23-26 likewise are patentable over Young in view of Dahlgren and Reynolds.

Claim 44 recites a system for analyzing business risk including “a computer processor in communication with a first computer storage system and a second computer storage system . . . an extraction engine component operated by the computer processor and configured to extract a structured events record from the plurality of articles . . . a semantic analysis tool operated by the computer processor and configured to extract event details and relationships between events and the target business entity from the component parts of speech and grammar structure . . . a pattern events database, stored on the second computer storage system, that comprises a plurality of templates of pattern events, wherein each template comprises a number and type of preselected events that form a pattern in an event category and temporal constraints that exist between the preselected events . . . and a pattern analyzer operated by the computer processor and configured to determine temporal relationships between the events based at least in part on the extracted event details and relationships, and compare the structured events record to the plurality of templates of pattern events including comparing the temporal relationships to the temporal constraints.”

Applicants respectfully submit that no combination of Young, Dahlgren, and Reynolds describes or suggests a system for analyzing business risk as is recited in Claim 44. Claim 44 recites a system configured to perform steps essentially similar to those recited in Claim 15. Thus, Applicants respectfully submit that Claim 44 is patentable for the reasons that correspond to those given with respect to Claim 15.

Accordingly, for at least the reasons set forth above, Claim 44 is submitted as patentable over Young in view of Dahlgren and Reynolds.

Claims 45-53 depend from independent Claim 44. When the recitations of Claims 45-53 are considered in combination with the recitations of Claim 44, Applicants respectfully submit that dependent Claims 45-53 likewise are patentable over Young in view of Dahlgren and Reynolds.

Claim 68 recites a computer-readable medium having tangibly stored thereon a computer program for determining business risk, wherein the computer program is programmed to cause a computer machine to perform the steps of "retrieving a plurality of articles . . . extracting event details and relationships between events and the target business entity from the component parts of speech and grammar structure . . . determining temporal relationships between the events based at least in part on the extracted event details and relationships . . . generating a structured events record from the extracted event details and relationships and from the temporal relationships . . . retrieving a plurality of templates of pattern events, wherein each template comprises a number and type of preselected events that form a pattern in an event category and temporal constraints that exist between the preselected events . . . comparing the structured events record to the plurality of templates of pattern events including comparing the temporal relationships to the temporal constraints . . ."

Applicants respectfully submit that no combination of Young, Dahlgren, and Reynolds describes or suggests a computer-readable medium having tangibly stored thereon a computer program for determining business risk as is recited in Claim 68. Claim 68 recites a computer-readable medium having tangibly stored thereon a computer program that is programmed to cause a computer machine to perform steps essentially similar to those recited in Claim 15. Thus, Applicants respectfully submit that Claim 68 is patentable for the reasons that correspond to those given with respect to Claim 15.

Accordingly, for at least the reasons set forth above, Claim 68 is submitted as patentable over Young in view of Dahlgren and Reynolds.

Claims 70-74 depend from independent Claim 68. When the recitations of Claims 70-74 are considered in combination with the recitations of Claim 68, Applicants respectfully submit that dependent Claims 70-74 likewise are patentable over Young in view of Dahlgren and Reynolds.

For at least the reasons set forth above, Applicants respectfully request that the rejection of Claims 15, 17-26, 44-53, 68, and 70-74 under Section 103 be withdrawn.

The rejection of Claims 15, 17-26, 44-53, 68, and 70-74 under 35 U.S.C. § 103(a) as being unpatentable over Young in view of Dahlgren, Reynolds, and U.S. Patent Application Publication Pub. No. 2001/0032092 (Calver) is respectfully traversed.

Young, Dahlgren, and Reynolds are described above.

Calver describes a small business web-based portal system. The system includes a pre-qualifying template, a sales process drill-down, and a product configurator to screen out unqualified users and target potential customers. Notably, Calver does not describe or suggest determining temporal relationships between events and generating a structure events record from the temporal relationships. Moreover, Calver does not describe or suggest comparing the structured events record to a plurality of templates of pattern events including comparing temporal relationships to temporal constraints.

Claim 15 is recited above.

Applicants respectfully submit that no combination of Young, Dahlgren, Reynolds, and Calver describes or suggests a computer-implemented method for determining business risk as is recited in Claim 15. Specifically, no combination of Young, Dahlgren, Reynolds, and Calver describes or suggests *determining temporal relationships between events* and generating a structure events record *from the temporal relationships*. (Emphasis added.) Moreover, no combination of Young, Dahlgren, and Reynolds describes or suggests comparing the structured events record to a plurality of templates of pattern events including *comparing temporal relationships to temporal constraints*. (Emphasis added.) As described above, Young merely describes identifying a plurality of business events and generating a record of the events, Dahlgren is cited to describe parsing articles into component parts of speech and grammar structure, and Reynolds is cited to describe computing a risk measure. Calver does not overcome the deficiencies of Young, Dahlgren, and Reynolds. Rather, Calver is cited to merely describe various types of search, query, and response functions.

Accordingly, for at least the reasons set forth above, Claim 15 is submitted as patentable over Young in view of Dahlgren, Reynolds, and Calver.

Claims 17-21 depend from independent Claim 15. When the recitations of Claims 17-21 are considered in combination with the recitations of Claim 15, Applicants respectfully submit that dependent Claims 17-21 likewise are patentable over Young in view of Dahlgren, Reynolds, and Calver.

Claim 22 is recited above.

Applicants respectfully submit that no combination of Young, Dahlgren, Reynolds, and Calver describes or suggests a computer-implemented method for monitoring business risk as is recited in Claim 22. Claim 22 recites a computer-implemented method including steps essentially similar to those recited in Claim 15. Thus, Applicants respectfully submit that Claim 22 is patentable for the reasons that correspond to those given with respect to Claim 15.

Accordingly, for at least the reasons set forth above, Claim 22 is submitted as patentable over Young in view of Dahlgren, Reynolds, and Calver.

Claims 23-26 depend from independent Claim 22. When the recitations of Claims 23-26 are considered in combination with the recitations of Claim 22, Applicants respectfully submit that dependent Claims 23-26 likewise are patentable over Young in view of Dahlgren, Reynolds, and Calver.

Claim 44 is recited above.

Applicants respectfully submit that no combination of Young, Dahlgren, Reynolds, and Calver describes or suggests a system for analyzing business risk as is recited in Claim 44. Claim 44 recites a system configured to perform steps essentially similar to those recited in Claim 15. Thus, Applicants respectfully submit that Claim 44 is patentable for the reasons that correspond to those given with respect to Claim 15.

Accordingly, for at least the reasons set forth above, Claim 44 is submitted as patentable over Young in view of Dahlgren, Reynolds, and Calver.

Claims 45-53 depend from independent Claim 44. When the recitations of Claims 45-53 are considered in combination with the recitations of Claim 44, Applicants respectfully submit



that dependent Claims 45-53 likewise are patentable over Young in view of Dahlgren, Reynolds, and Calver.

Claim 68 is recited above.

Applicants respectfully submit that no combination of Young, Dahlgren, Reynolds, and Calver describes or suggests a computer-readable medium having tangibly stored thereon a computer program for determining business risk as is recited in Claim 68. Claim 68 recites a computer-readable medium having tangibly stored thereon a computer program that is programmed to cause a computer machine to perform steps essentially similar to those recited in Claim 15. Thus, Applicants respectfully submit that Claim 68 is patentable for the reasons that correspond to those given with respect to Claim 15.


Accordingly, for at least the reasons set forth above, Claim 68 is submitted as patentable over Young in view of Dahlgren, Reynolds, and Calver.

Claims 70-74 depend from independent Claim 68. When the recitations of Claims 70-74 are considered in combination with the recitations of Claim 68, Applicants respectfully submit that dependent Claims 70-74 likewise are patentable over Young in view of Dahlgren, Reynolds, and Calver.

For at least the reasons set forth above, Applicants respectfully request that the rejection of Claims 15, 17-26, 44-53, 68, and 70-74 under Section 103 be withdrawn.

In view of the foregoing amendment and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Daniel M. Fitzgerald", is written over a horizontal line.

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